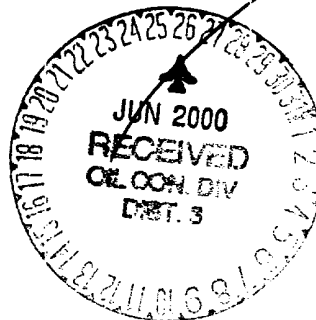


BURLINGTON RESOURCES

SAN JUAN DIVISION



Sent Federal Express

Mr. Michael Stogner
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: San Juan 27-5 Unit #83M
2550'FNL, 2076'FWL Section 9, T-27-N, R-5-W, Rio Arriba County
30-039-26292

Dear Mr. Stogner:

Burlington Resources is applying for administrative approval of an unorthodox gas well location for the Basin Dakota. This well is planned as a Blanco Mesaverde/Basin Dakota commingled well. The referenced footage is a standard location for the Mesaverde by Order R-10987A dated February 3, 1999. This location is at the request of the Bureau of Land Management due to rough terrain in the form of very steep slopes which prevent an acceptable access road and well location.

Production from the Dakota pool is to be included in a 320 acre gas spacing and proration unit for the north half (N/2) in Section 9. Production from the Mesaverde is to be included in a 320 acre gas spacing and proration unit for the west half (W/2) in Section 9. Order DHC-2584 was received to commingle production from the Dakota and Mesaverde.

The following attachments are for your review:

- Application for Permit to Drill
- Completed C-102 at referenced location.
- Offset operators/owners plat - Burlington is the operator of the San Juan 27-5 Unit
- Topographic map

st
Burlington Resources believes there are no correlative rights issues because the encroachment is toward federal unit property. The San Juan 27-5 Unit #83M well is offset by San Juan 27-5 Unit acreage and Burlington is the operator of the San Juan 27-5 Unit.

Sincerely,

Peggy Cole
Peggy Cole
Regulatory Supervisor

xc: NMOCD - Aztec District Office
Bureau of Land Management

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

| | | |
|---|--|-----------------|
| 1a. Type of Work DRILL | 5. Lease Number SF-079391 Unit Reporting Number DK-8910009500 MV-891000950A | |
| 1b. Type of Well GAS | 6. If Indian, All. or Tribe | |
| 2. Operator BURLINGTON RESOURCES Oil & Gas Company | 7. Unit Agreement Name San Juan 27-5 Unit | |
| 3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700 | 8. Farm or Lease Name San Juan 27-5 Unit 9. Well Number 83M | |
| 4. Location of Well 2550' FNL, 2075' FWL Latitude 36° 35.3, Longitude 107° 22.0 | 10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 9, T-27-N, R-5-W API # 30-039-26292 | |
| 14. Distance in Miles from Nearest Town 60 miles from Blanco | 12. County Rio Arriba | 13. State NM |
| 15. Distance from Proposed Location to Nearest Property or Lease Line 2075' | 17. Acres Assigned to Well MV - 320 W/2 DK - 320 N/2 | |
| 16. Acres in Lease | | |
| 18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 1000' | | |
| 19. Proposed Depth 8549' | 20. Rotary or Cable Tools Rotary | |
| 21. Elevations (DF, FT, GR, Etc.) 7297' GR | 22. Approx. Date Work will Start | |
| 23. Proposed Casing and Cementing Program See Operations Plan attached | DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS". | |
| 24. Authorized by: <u>Jeann Cole</u> Regulatory/Compliance Administrator | <u>12-20-99</u> Date | |

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

Archaeological Report to be submitted

Threatened and Endangered Species Report to be submitted

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

OPERATOR

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submitted to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|------------------------------------|--|---|
| ¹ API Number 30-039 | ² Pool Code 72319/71599 | ³ Pool Name Blanco Mesaverde/Basin Dakota |
| ⁴ Property Code 7454 | ⁵ Property Name SAN JUAN 27-5 UNIT | ⁶ Well Number 83M |
| ⁷ OCRD No. 14538 | ⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY | ⁹ Elevation 7297' |

¹⁰ Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| F | 9 | 27-N | 5-W | | 2550 | NORTH | 2075 | WEST | RIO ARRIBA |

¹¹ Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---------|----------|-------------------------------|---------|----------------------------------|------------------|-------------------------|----------------|--------|
| | | | | | | | | | |
| ¹² Dedicated Acres MV: W/320 DK: N/320 | | | ¹³ Joint or Infill | | ¹⁴ Consolidation Code | | ¹⁵ Order No. | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

| | | |
|------------------------------|------------------|------------------------------|
| 16 S 88-55-55 E | 2671.03' (MEAS.) | FD. 1957 BLM BRASS CAP |
| 2075' | 2550' | NMSF-079391 |
| FD. 1957 BLM BRASS CAP | | |
| NMSF-079391 | | |

LAT. 36° 35.3' N
LONG. 107° 22.0' W

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Peggy Cole
Signature
Peggy Cole
Printed Name
Regulatory Administrator
Title
12-20-99
Date

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief

11-12-99
Date of Survey
[Signature]
Signature and Seal of Professional Surveyor
8894
Certificate Number

OPERATIONS PLAN

Well Name: San Juan 27-5 Unit #83M
Location: 2550' FNL, 2075' FWL, Sec 9, T-27-N, R-5-W
Rio Arriba County, NM
Latitude 36° 35.3, Longitude 107° 22.0
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 7297' GL

| <u>Formation Tops:</u> | <u>Top</u> | <u>Bottom</u> | <u>Contents</u> |
|------------------------|--------------|---------------|-----------------|
| Surface | San Jose | 3449' | |
| Ojo Alamo | 3449' | 3629' | aquifer |
| Kirtland | 3629' | 3699' | gas |
| Fruitland | 3699' | 4118' | gas |
| Pictured Cliffs | 4118' | 4209' | gas |
| Lewis | 4209' | 4659' | gas |
| Intermediate TD | 4309' | | |
| Mesa Verde | 4659' | 5070' | gas |
| Chacra | 5070' | 5784' | gas |
| Massive Cliff House | 5784' | 5929' | gas |
| Menefee | 5929' | 6289' | gas |
| Massive Point Lookout | 6289' | 6788' | gas |
| Mancos | 6788' | 7458' | gas |
| Gallup | 7458' | 8224' | gas |
| Greenhorn | 8224' | 8284' | gas |
| Graneros | 8284' | 8319' | gas |
| Dakota | 8319' | | gas |
| TD | 8549' | | |

Logging Program:

Cased hole - CBL-CCL-GR - TD to surface
Cores - none

Mud Program:

| <u>Interval</u> | <u>Type</u> | <u>Weight</u> | <u>Vis.</u> | <u>Fluid Loss</u> |
|-----------------|-------------|---------------|-------------|-------------------|
| 0- 200' | Spud | 8.4-9.0 | 40-50 | no control |
| 200- 4309' | LSND | 8.4-9.0 | 30-60 | no control |
| 4309- 8549' | Gas | n/a | n/a | n/a |

Pit levels will be visually monitored to detect gain or loss of fluid control.

Casing Program (as listed, the equivalent, or better):

| <u>Hole Size</u> | <u>Depth Interval</u> | <u>Csg. Size</u> | <u>Wt.</u> | <u>Grade</u> |
|------------------|-----------------------|------------------|------------|--------------|
| 12 1/4" | 0' - 200' | 9 5/8" | 32.3# | WC-50 |
| 8 3/4" | 0' - 4309' | 7" | 20.0# | J-55 |
| 6 1/4" | 4209' - 8549' | 4 1/2" | 10.5# | K-55 |

Tubing Program:

0' - 8549' 2 3/8" 4.7# J-55

BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1).
After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 psi for 30 minutes.

Intermediate TD to Total Depth -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1).
After nipple-up prior to drilling out intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.

Surface to Total Depth -

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

Completion Operations -

7 1/16" 2000 psi double gate BOP stack (Reference Figure #2).
After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 2000 psi for 15 minutes.

Wellhead -

9 5/8" x 7" x 2 3/8" x 3000 psi tree assembly.

General -

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing:

9 5/8" surface casing - cement with 159 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (188 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. Test casing to 600 psi for 30 minutes.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing -

Lead w/402 sx Class "B" w/3% sodium metasilicate, 7# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% calcium chloride, 2% gel (1296 cu.ft. of slurry, 100% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run during completion operations to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage: Stage collar at 3599'. First stage: cement with w/158 sx Class "B" 50/50 poz w/2% gel, 2% calcium chloride, 0.5 pps Cellophane. Second stage: 369 sx Class "B" with 3% sodium metasilicate, 1/2 pps Cellophane, 10 pps Gilsonte (1296 cu.ft., 100% excess to circulate to surface).

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo at 3629'. Two turbolating centralizers at the base of the Ojo Alamo at 3629'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Liner -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Lead with 491 sx 50/50 Class "H" Poz with 2% gel, 0.25# flocele/sx, 5# gilsonite/sx, 0.2% retardant and 0.4% fluid loss additive (624 cu.ft.), 40% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

Cement float shoe on bottom with float collar spaced on top of shoe joint.

Note: To facilitate higher hydraulic stimulation completion work, no liner hanger will be used. In its place, a long string of 4 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 4 1/2" x 7" casing strings. After completion of the well, a 4 1/2" retrievable bridge plug will be set below the top of cement in the 4 1/2" x 7" overlap. The 4 1/2" casing will then be backed off above the top of cement in the 4 1/2" x 7" overlap and laid down. The 4 1/2" bridge plug will then be retrieved and the production tubing will be run to produce the well.

- If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

Special Drilling Operations (Gas/Mist Drilling):

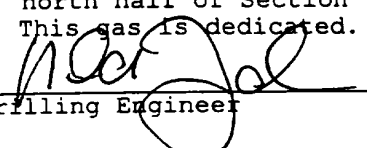
The following equipment will be operational while gas/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.
- Deduster equipment will be utilized.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

Additional Information:

- The Dakota and Mesa Verde formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

| | |
|-----------------|----------|
| Fruitland Coal | 300 psi |
| Pictured Cliffs | 600 psi |
| Mesa Verde | 700 psi |
| Dakota | 2500 psi |
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The west half of Section 9 is dedicated to the Mesaverde and the north half of Section 9 is dedicated to the Dakota in this well.
- This gas is dedicated.


Drilling Engineer

12/27/1999
Date

BURLINGTON RESOURCES OIL AND GAS COMPANY

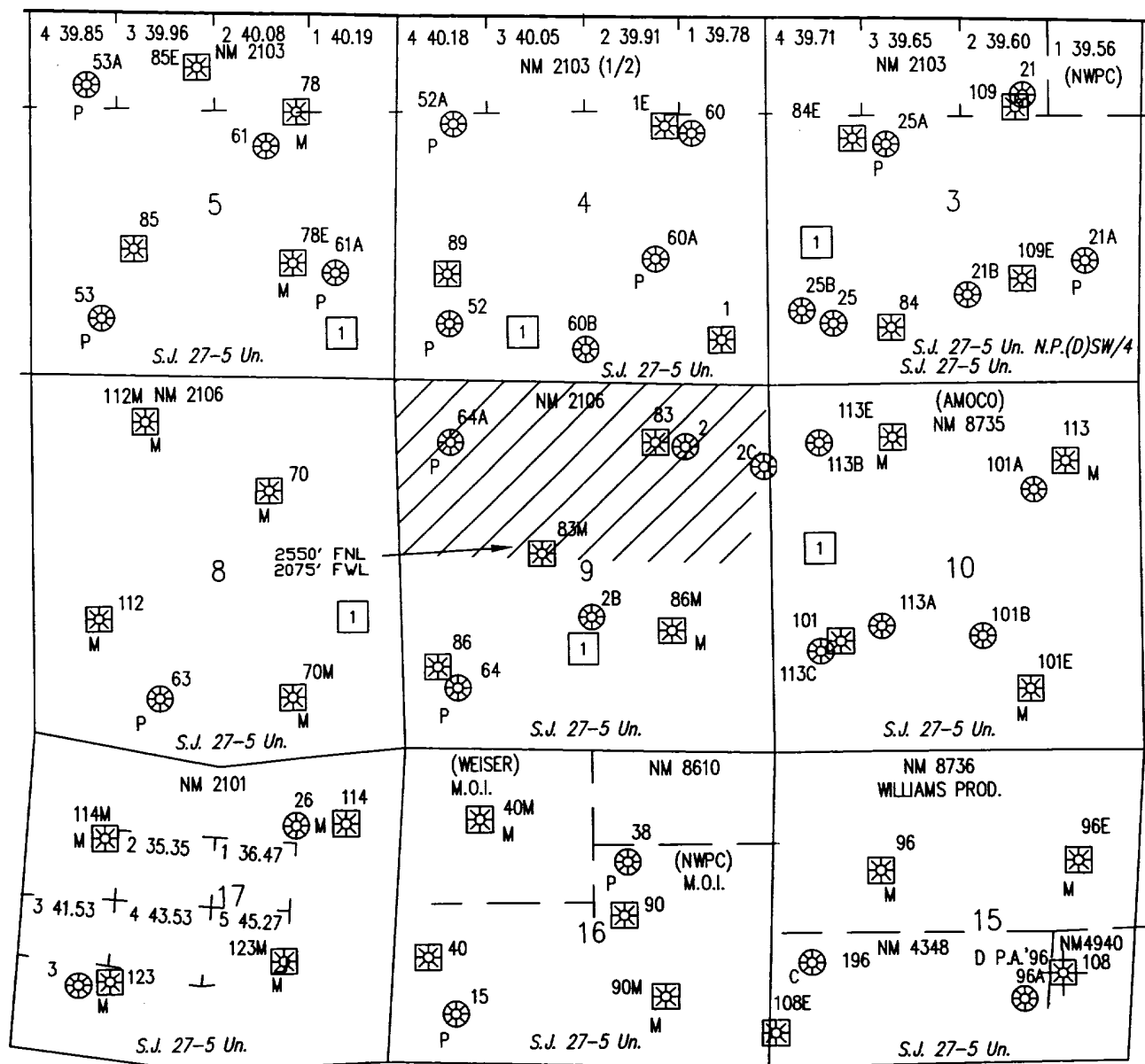
San Juan 27-5 Unit #83M

Section 9, T-27-N, R-5-W

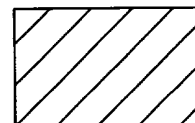
OFFSET OPERATOR/OWNER PLAT

Nonstandard Location

Dakota Formation Well



Burlington Resources



Proposed Well

BURLINGTON RESOURCES OIL & GAS COMPANY

SAN JUAN 27-5 UNIT #83M

NW/4 SEC. 9, T-27-N, R-5-W, N.M.P.M.,

RIO ARriba COUNTY, NEW MEXICO

2550' FNL, 2075' FWL

APD MAP #1

1000' NEW CONSTRUCTION

200' SE/NW SEC. 9, T-27-N, R-5-W, N.M.P.M.,

800' NW/SW SEC. 9, T-27-N, R-5-W, N.M.P.M.,

Magdalena

Campana

Gas Well

Munoz

NEW CONSTRUCTION

NEW ACCESS

16

17

18

BURLINGTON RESOURCES OIL & GAS COMPANY

SAN JUAN 27-5 UNIT #83M

NW/4 SEC. 9, T-27-N, R-5-W, N.M.P.M.,

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34

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BURLINGTON RESOURCES OIL & GAS COMPANY

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The map displays a topographic representation of a land area with various contour lines indicating elevation. Key features include:

- Section Lines:** A grid system delineating sections, with labels such as 'NW/4 SEC. 9' and 'SE/4 SEC. 9'.
- Elevation Contours:** Numerous contour lines are drawn across the map, labeled with values ranging from approximately 6400 to 7200 feet.
- Proposed Construction:** A large rectangular area is outlined with dashed lines, representing the '1000' NEW CONSTRUCTION' zone.
- Access Points:** Two specific locations are marked with arrows and labeled 'NEW ACCESS' and 'NEW FLAG'.
- Existing Features:** Labels for 'Magdalena Elites', 'Gas Well', and 'Carrizo' are present, along with other geographical markers like 'Muñoz' and 'Campana'.
- Scale and Orientation:** A scale bar at the top left indicates distances up to 1000 feet. A north arrow is located near the center of the map.

BURLINGTON RESOURCES OIL & GAS COMPANY

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